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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,864	12/10/1999	LEE A. BULLA	271122003713	8156

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EXAMINER
KAUFMAN, CLAIRE M

ART UNIT	PAPER NUMBER
1646	16

DATE MAILED: 07/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

#1617

Response to Rule 312 Communication	Application No.	Applicant(s)	
	09/457,864	BULLA, LEE A.	
	Examiner	Art Unit	
	Claire M. Kaufman	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

1. ☒ The amendment filed on *14 June 2002* under 37 CFR 1.312 has been considered, and has been:

a) ☒ entered.

b) ☐ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

See attached Supplemental Examiner's Amendment

Lorraine Spector

LORRAINE SPECTOR
PRIMARY EXAMINER

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SUPPLEMENTAL EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bruce D. Grant on July 9, 2002.

The application has been amended as follows:

Please replace claim 13 with the following Clean Version:

9 ~~13.~~ (Twice Amended) A method to produce a BT-toxin receptor protein, or a fragment thereof, said method comprising the steps of:

(i) culturing a cell that has been altered to contain a nucleic acid molecule that encodes a BT-toxin receptor protein under conditions suitable for expression of said receptor, wherein said cell has been altered to contain a nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule that encodes the amino acid sequence of SEQ ID NO:2;

(b) a nucleic acid molecule encoding a BT-toxin receptor, wherein said nucleic acid molecule hybridizes to the polynucleotide sequence of SEQ ID NO:1 under stringent conditions, and wherein said receptor is obtainable from an insect; and

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(c) a nucleic acid molecule encoding a BT-toxin receptor, wherein said nucleic acid molecule hybridizes to the polynucleotide sequence of SEQ ID NO:1 under stringent conditions, wherein the receptor encoded by the nucleic acid binds to the CryIA(b) toxin;

(ii) isolating said BT-toxin receptor protein;

wherein the stringent conditions comprise:

50% formamide, 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate (pH 6.5), 750 mM NaCl, and 75 mM sodium citrate at 42°C, with washes at 42°C in 0.2x SSC and 0.1% SDS;

or

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7' cont.

50% formamide, 5x SSC, 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5x Denhardt's solution, sonicated salmon sperm DNA (50 μg/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2x SSC and 0.1% SDS;

or

0.015M NaCl, 0.0015M sodium citrate, and 0.1% SDS at 50°C.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire M. Kaufman, whose telephone number is (703) 305-5791. Dr. Kaufman can generally be reached Monday through Thursday from 8:30AM to 12:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached at (703) 308-6564.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294. NOTE: If applicant *does* submit a paper by fax, the original signed copy should be retained by the applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office. **Please** advise the examiner at the telephone number above before facsimile transmission.

Claire M. Kaufman, Ph.D.

Claire M. Kaufman

Patent Examiner, Art Unit 1646

July 9, 2002

Marked up version:

13. (Twice Amended) A method to produce a BT-toxin receptor protein, or a fragment thereof, said method comprising the steps of:

(i) culturing a cell that has been altered to contain a nucleic acid molecule that encodes a BT-toxin receptor protein[, or BT-toxin binding fragment thereof,] under conditions suitable for expression of said receptor protein[or fragment thereof], wherein said cell has been altered to contain a nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule that encodes the amino acid sequence of SEQ ID NO:2;

(b) a nucleic acid molecule encoding a BT-toxin receptor, wherein said nucleic acid molecule hybridizes to the polynucleotide sequence of SEQ ID NO:1 under stringent conditions, and wherein said receptor is obtainable from an insect; and

(c) a nucleic acid molecule encoding a BT-toxin receptor, wherein said nucleic acid molecule hybridizes to the polynucleotide sequence of SEQ ID NO:1 under stringent conditions, wherein the receptor encoded by the nucleic acid binds to the CryIA(b) toxin;

(ii) isolating said BT-toxin receptor protein[or fragment];

wherein the stringent conditions comprise:

50% formamide, 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate (pH 6.5), 750 mM NaCl, and 75 mM sodium citrate at 42°C, with washes at 42°C in 0.2x SSC and 0.1% SDS;

or

50% formamide, 5x SSC, 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5x Denhardt's solution, sonicated salmon sperm DNA (50 μg/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2x SSC and 0.1% SDS;

or

0.015M NaCl, 0.0015M sodium citrate, and 0.1% SDS at 50°C.